

1. Record Nr.	UNINA9910456169503321
Autore	Findlay Edward F. <1965->
Titolo	Caring for the soul in a postmodern age [[electronic resource]] : politics and phenomenology in the thought of Jan Patočka / / Edward F. Findlay
Pubbl/distr/stampa	Albany, : State University of New York Press, c2002
ISBN	0-7914-8806-3 0-585-48300-0
Descrizione fisica	1 online resource (267 p.)
Disciplina	199/.437
Soggetti	Philosophy, Modern Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. 241-249) and index.

2. Record Nr.	UNINA9910540210803321
Autore	Naghshpour Shahdad
Titolo	Statistics for economics [[electronic resource] /] / Shahdad Naghshpour
Pubbl/distr/stampa	[New York, N.Y.] (222 East 46th Street, New York, NY 10017), : Business Expert Press, 2012
ISBN	1-283-89505-6 1-60649-404-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (313 p.)
Collana	Economics collection, , 2163-7628
Disciplina	330.015195
Soggetti	Economics - Statistical methods Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Part of: 2012 digital library.
Nota di bibliografia	Includes bibliographical references (p. 187-188) and index.
Nota di contenuto	Statistics is the science of finding order in chaos -- Introduction -- 1. Descriptive statistics -- 2. Numerical descriptive statistics for quantitative variables -- 3. Some applications of descriptive statistics -- 4. Distribution functions -- 5. Sampling distribution of sample statistics -- 6. Point and interval estimation -- 7. Statistical inference with test of hypothesis -- 8. An introduction to regression analysis -- 9. Conclusion -- Glossary -- References -- Index.
Sommario/riassunto	Statistics is the branch of mathematics that deals with real-life problems. As such, it is an essential tool for economists. Unfortunately, the way the concept of statistics is introduced to students is not compatible with the way economists think and learn. The problem is worsened by the use of mathematical jargon and complex derivations. However, as this book demonstrates, neither is necessary. This book is written in simple English with minimal use of symbols, mostly for the sake of brevity and to make reading literature more meaningful.

3. Record Nr.	UNINA9910830783203321
Autore	Young Brent R.
Titolo	A real-time approach to distillation process control / / Brent R. Young, Michael A. Taube, Isuru A. Udagama
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2023] ©2023
ISBN	1-394-18594-4 1-119-66924-3
Descrizione fisica	1 online resource (258 pages)
Disciplina	663.506
Soggetti	Distillation Chemical process control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Preface -- About the Companion Website -- Chapter 1 Introduction -- 1.1 The Purpose of Process Control -- 1.2 Introduction to Distillation -- 1.3 Distillation Process Control -- 1.4 A Real-Time Approach to Distillation Process Control Education -- Tutorial and Self Study Questions -- References -- Chapter 2 Fundamentals of Distillation Control -- 2.1 Mass and Energy Balance: The Only Means to Affect Distillation Tower's Behavior -- 2.2 Control Design Procedure -- 2.3 Degrees of Freedom -- 2.4 Pairing -- 2.5 Gain Analysis -- 2.6 Common Control Configuration -- 2.7 Screening Control Strategies via Steady-State Simulation -- Tutorial and Self-Study Questions -- References -- Chapter 3 Control Hardware -- 3.1 Introduction -- 3.2 Control Hardware Overview -- 3.3 Sensors -- 3.3.1 Process Considerations -- 3.3.2 Flow Measurement Devices -- 3.3.3 Pressure Measurement Devices -- 3.3.4 Level Measurement Devices -- 3.3.5 Temperature Measurement Devices -- 3.3.6 Direct Composition Measurements -- 3.3.7 Maintenance -- 3.4 Final Control Elements -- 3.4.1 Linearity -- 3.4.2 Time Constant and Failure Mode -- 3.4.3 Mechanical Design Considerations -- 3.5 Controllers/CPU -- 3.5.1 Level 0 -- 3.5.2 Level 1 -- 3.5.3 Levels 2 and 3 -- 3.5.4 General Set Up and Considerations -- 3.6 Modern Trends -- 3.6.1 Wireless Communication and Smart

Devices -- 3.6.2 Smart CPUs -- 3.6.3 Digital Twins -- Tutorial and Self-Study Questions -- References -- Chapter 4 Inventory Control -- 4.1 Pressure Control -- 4.1.1 Total Condenser -- 4.1.2 Flooded Condensers -- 4.1.3 Sub-Cooled Reflux -- 4.1.4 Partial Condenser -- 4.2 Level Control -- 4.2.1 Surge Capacity Control -- 4.2.2 Open-Loop Stable versus Integrating Processes -- 4.2.3 Calculating the Process Gain for Vessel Levels.

4.2.4 Relative Gain Analysis, aka Closing the Loop in Plant Design -- Tutorial and Self-Study Questions -- References -- Chapter 5

Distillation Composition Control -- 5.1 Temperature Control -- 5.1.1 Setting Up a Single Temperature-Based Composition Controller -- 5.1.2 When Temperature Is Like an Integrating Process -- 5.1.3 Reboiler Outlet Temperature Controls -- 5.2 Actual Composition Control -- 5.3 More Complex Control Configurations -- 5.3.1 Ryskamp's Scheme -- 5.3.2 Dual Composition Control -- 5.4 Distillation Control Scheme Design Using Steady-State Models -- 5.5 Performance Analysis Using Steady-State Data for an Existing Distillation Tower -- 5.6 Distillation Control Scheme Design Using Dynamic Models -- Tutorial and Self-Study Questions -- References -- Chapter 6 Refinery Versus Chemical Plant Distillation Operations -- 6.1 New Generation of Refinery Controls -- 6.1.1 Atmospheric and Vacuum Refining Columns -- 6.2 Improving Thermodynamic Efficiency Through Control -- 6.3 Blending and Its Implications on Control -- Tutorial and Self-Study Questions -- References -- Chapter 7 Distillation Controller Tuning -- 7.1 Model Identification: Step Testing -- 7.2 Typical Process Responses -- 7.3 Engineering Units Versus Percent-of-Scale -- 7.4 Basics in PID Tuning -- 7.5 Tuning in Distillation Control -- 7.6 The Role of Tuning in a "Value Engineering" Era -- Tutorial and Self-Study Questions -- References -- Chapter 8 Fine and Specialty Chemicals Distillation Control -- 8.1 Key Features -- 8.2 Measurement and Control Challenges -- 8.3 Nuances of Fine Chemicals Distillation -- 8.4 Side-Draw Distillation -- 8.5 Composition Control in High-Purity Side-Draw Distillation -- 8.6 Advanced Distillation Column Configurations -- 8.7 Petlyuk and Divided Wall Columns -- 8.8 Optimal Design Versus Optimal Operations -- 8.9 Conclusions.

Tutorial and Self-Study Questions -- References -- Chapter 9

Advanced Regulatory Control -- 9.1 Introduction -- 9.2 Cascade Control -- 9.2.1 Cascade Control in Distillation -- 9.2.2 Inferential Cascade Control -- 9.3 Ratio Control -- 9.3.1 Ratio Control in Distillation -- 9.4 Feedforward Control -- 9.5 Constraint/Override Control -- 9.6 Decoupling -- Tutorial and Self-Study Questions -- References -- Chapter 10 Model Predictive Control -- 10.1 Introduction to MPC -- 10.2 To MPC or not to MPC -- 10.3 MPC Fundamentals -- 10.4 Dynamic Matrix Control -- 10.5 Setting Up a MPC in Distillation -- 10.5.1 Model Setup -- 10.5.2 Objective Function -- 10.5.3 Tuning -- 10.6 Digitalization and MPC -- Tutorial and Self-Study Questions -- References -- Chapter 11 Plant-Wide Control in Distillation -- 11.1 Distillation Column Trains -- 11.1.1 Average Flow Control -- 11.1.2 Alternatives to Average-Level Control -- 11.2 Heat Integration (Energy Recycle) -- 11.2.1 Auxiliary Steam Boilers -- 11.2.2 Feed Preheating -- 11.2.3 High-pressure/Low-pressure Columns -- 11.2.4 Mechanical Vapor Recompression -- 11.3 Materials Recycling -- Tutorial and Self-Study Questions -- References -- Workshop 1 Hands-on Learning By Doing -- Workshop 2 Fundamental Distillation Column Control -- Workshop 3 Distillation Column Model Predictive Control -- Workshop 4 Distillation Column Control in a Plant-Wide Setting -- Appendix A P& -- ID Symbols -- Index -- EULA.

using process simulation. The topics and their treatment are relevant to today's engineer providing them with the fundamental knowledge and tools to apply to modern distillation control. Unlike other texts that take a Laplace Transform or state-space-based approach this text presents a more balanced real-time approach with a good mix of fundamentals and practical insights. The text includes numerous exercises including up to date process simulation exercises. Finally, the process simulation exercises are designed to be simulator agnostic so that they can be performed on the process simulator locally available. Topics include An Introduction to the Real-Time Approach to Distillation Control, Distillation Control Hardware, Basic Distillation Control, Distillation Composition Control, Refinery Versus Chemical Plant Distillation Control, Distillation Control Tuning, Fine Chemical Distillation Control, Advanced Regulatory Control (ARC), Model Predictive Control (MPC), and Plant-Wide Control and Distillation"--
